ABSTRACT

ASSIGNING INTERRUPTS FOR INPUT/OUTPUT (I/O) DEVICES AMONG
5   NODES OF A NON-UNIFORM MEMORY ACCESS (NUMA) SYSTEM

Assigning interrupts for I/O devices among the nodes of NUMA systems is disclosed.
At least one of the following is performed. First, interrupts for the devices are assigned among
10   the nodes based on at least one of: the nodes to which the devices are connected, the nodes at
which interrupt service routines for the devices reside, and the processors of the nodes. Second,
for each node, the interrupts for the devices that are performance critical and that have been
assigned to the node are assigned to the processors of the node in a round-robin manner. Third,
assignments of the interrupts among the nodes of the system are dynamically modified based on
15   actual performance characteristics of the assignments. Fourth, for each node, assignments of the
interrupts that are performance critical and that have been assigned to the node are dynamically
modified based on actual performance characteristics of the assignments.